

AXIS M42 Network Camera Series

AXIS M4206-LV Network Camera

AXIS M4206-V Network Camera

AXIS M42 Network Camera Series

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About this manual

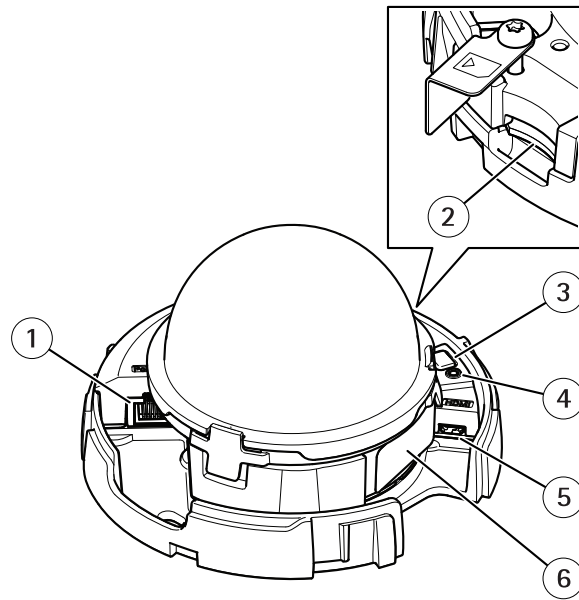
About this manual

This user manual describes several products. This means you may find instructions that aren't applicable to your product.

AXIS M42 Network Camera Series

Product overview

Product overview

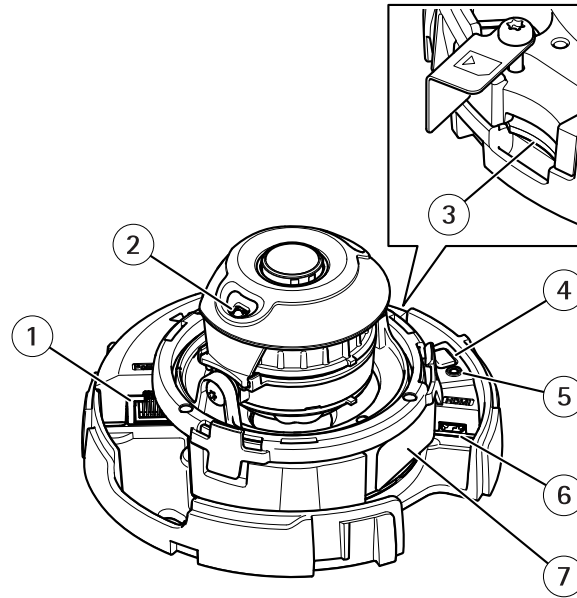


AXIS M4206-V

- 1 Network connector (PoE)
- 2 SD memory card slot
- 3 Control button
- 4 Status LED indicator
- 5 HDMI connector
- 6 Part number (P/N) & Serial number (S/N)

AXIS M42 Network Camera Series

Product overview



AXIS M4206-LV

- 1 Network connector (PoE)
- 2 IR illumination
- 3 SD memory card slot
- 4 Control button
- 5 Status LED indicator
- 6 HDMI connector
- 7 Part number (P/N) & Serial number (S/N)

AXIS M42 Network Camera Series

Installation

Installation



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10170562

Installation video for the product.

AXIS M42 Network Camera Series

Get started

Get started

Find the device on the network

To find Axis devices on the network and assign them IP addresses in Windows®, use AXIS IP Utility or AXIS Device Manager. Both applications are free and can be downloaded from axis.com/support.

For more information about how to find and assign IP addresses, go to *How to assign an IP address and access your device*.

Browser support

You can use the device with the following browsers:

	Chrome™	Firefox®	Edge™	Safari®
Windows®	recommended	recommended	x	
macOS®	recommended	recommended	x	x
Linux®	recommended	recommended	x	
Other operating systems	x	x	x	x*

*Supported in iOS and iPadOS

If you need more information about recommended browsers, go to *AXIS OS Portal*.

Access the device

1. Open a browser and enter the IP address or host name of the Axis device.
If you do not know the IP address, use AXIS IP Utility or AXIS Device Manager to find the device on the network.
2. Enter the username and password. If you access the device for the first time, you must set the root password. See *Set a new password for the root account on page 7*.
3. The live view page opens in your browser.

Set a new password for the root account

Important

The default administrator username is **root**. If the password for root is lost, reset the device to factory default settings. See *Reset to factory default settings on page 23*



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10098905

Support tip: Password security confirmation check

AXIS M42 Network Camera Series

Get started

1. Type a password. Follow the instructions about secure passwords. See *Secure passwords* on page 8.
2. Retype the password to confirm the spelling.
3. Click Create login. The password has now been configured.

Secure passwords

Important

Axis devices send the initially set password in clear text over the network. To protect your device after the first login, set up a secure and encrypted HTTPS connection and then change the password.

The device password is the primary protection for your data and services. Axis devices do not impose a password policy as they may be used in various types of installations.

To protect your data we strongly recommend that you:

- Use a password with at least 8 characters, preferably created by a password generator.
- Don't expose the password.
- Change the password at a recurring interval, at least once a year.

Webpage overview

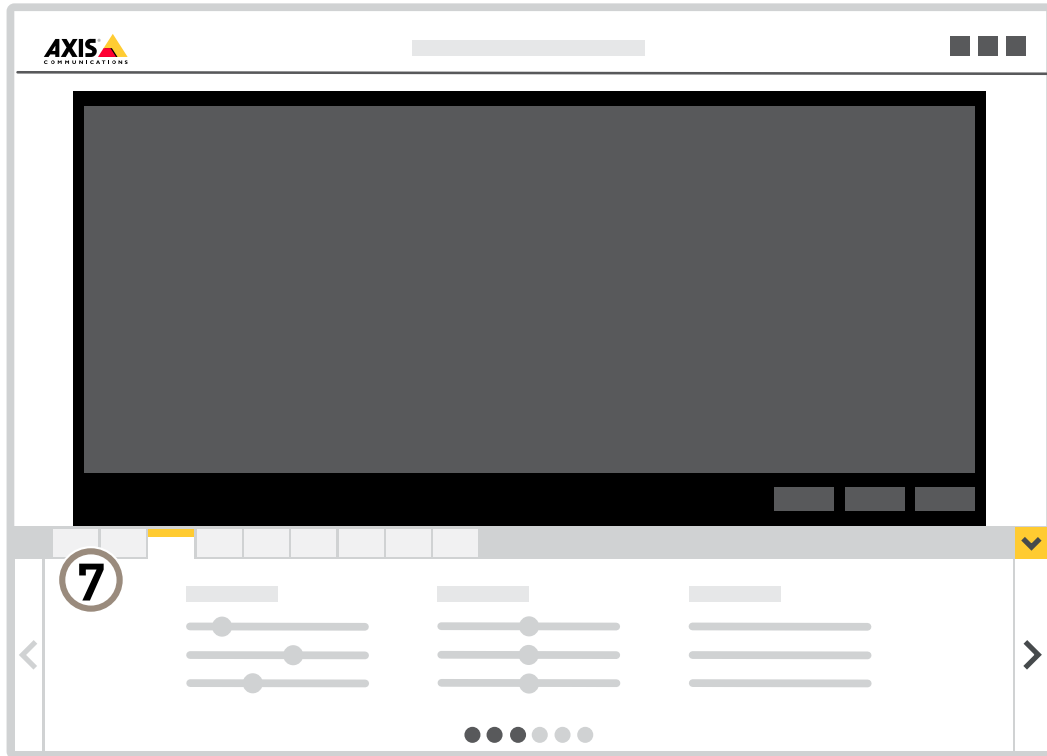


- 1 Live view control bar
- 2 Live view

AXIS M42 Network Camera Series

Get started

- 3 *Product name*
- 4 *User information, color themes, and help*
- 5 *Video control bar*
- 6 *Settings toggle*



- 7 *Settings tabs*

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Additional settings

Additional settings

Adjust the image

This section includes instructions about how to configure your device. If you want to learn more about how certain features function, go to *Learn more on page 19*.

Adjust the zoom and focus

To adjust the zoom:

1. Go to **Settings > Image > Zoom** and use the slider to adjust the zoom.

To adjust the focus:

1. Go to **Settings > Image > Focus** and click **Show AF area**.
2. Adjust the autofocus area to cover the part of the image that you want to be in focus.

If you don't select an autofocus area, the camera focuses on the entire scene. We recommend that you focus on a static object.
3. Click **Autofocus**.
4. To fine tune the focus, use the focus slider.

Optimize IR illumination

In most cases, the exposure of the image is automatically adjusted to obtain optimal image quality. If the camera is placed close to a wall or a corner, it can sometimes result in saturation of parts of the image. When this happens, the LED's closest to the wall or corner are automatically dimmed to avoid saturating the image.

Depending on the installation environment and the conditions around the camera, for example external light sources in the scene, you can sometimes improve the IR illumination if you manually adjust the intensity of the LED's.

1. Go to **Settings > Image > Day and night**, and turn on **Allow illumination**.
2. Turn on **Live view control**.
3. Minimize **Settings**.
4. In the live view control bar, click the **Illumination** button, turn on **IR light** and select **Manual**.
5. Adjust the intensity.

Benefit from IR light in low-light conditions using night mode

Your camera uses visible light to deliver color images during the day. As the available light diminishes, you can set the camera to automatically shift to night mode, in which the camera uses both visible light and near-infrared light to deliver black-and-white images. Since the camera uses more of the available light it can deliver brighter, more detailed, images.

1. Go to **Settings > Image > Day and night**, and make sure that the **IR cut filter** is set to **Auto**.
2. To determine at what light level you want the camera to shift to night mode, move the **Threshold** slider toward **Bright** or **Dark**.
3. Enable **Allow IR illumination** and **Synchronize IR illumination** to use the camera's IR light when night mode is activated.

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Additional settings

Note

If you set the shift to night mode to occur when it's brighter, the image remains sharper as there will be less low-light noise. If you set the shift to occur when it's darker, the image colors are maintained for longer, but there will be more image blur due to low-light noise.

Reduce motion blur in low-light conditions

To reduce motion blur in low-light conditions, adjust one or more of the following settings in **Settings > Image > Exposure**:

- Move the **Blur-noise trade-off** slider toward **Low motion blur**.

Note

When you increase the gain, image noise also increases.

- Set **Max shutter** to a shorter time, and **Max gain** to a higher value.

If you still have problems with motion blur:

- Increase the light level in the scene.
- Mount the camera so that objects move toward it or away from it rather than sideways.

Handle scenes with strong backlight

Dynamic range is the difference in light levels in an image. In some cases the difference between the darkest and the brightest areas can be significant. The result is often an image where either the dark or the bright areas are visible. Wide dynamic range (WDR) makes both dark and bright areas of the image visible.



Image without WDR.



Image with WDR.

Note

- WDR can cause artifacts in the image.
- WDR may not be available for all capture modes.

AXIS M42 Network Camera Series

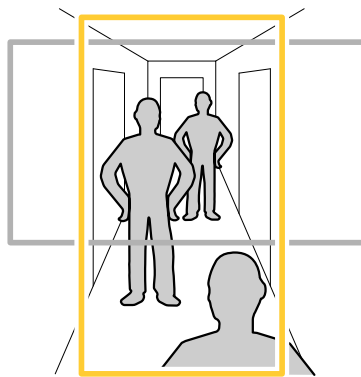
Additional settings

1. Go to **Settings > Image > Wide dynamic range**.
2. Turn on WDR.
3. Use the **Local contrast** slider to adjust the amount of WDR.
4. If you still have problems, go to **Exposure** and adjust the **Exposure zone** to cover the area of interest.

Find out more about WDR and how to use it at axis.com/web-articles/wdr.

Monitor long and narrow areas


Use corridor format to better utilize the full field of view in a long and narrow area, for example a staircase, hallway, road, or tunnel.



1. Depending on your device, turn the camera or the 3-axis lens in the camera 90° or 270°.

Note

Make sure to aim IR LEDs away from walls or weathershields.

2. If the device doesn't have automatic rotation of the view, log in to the webpage and go to **Settings > System > Orientation**.
3. Click .
4. Rotate the view 90° or 270°.

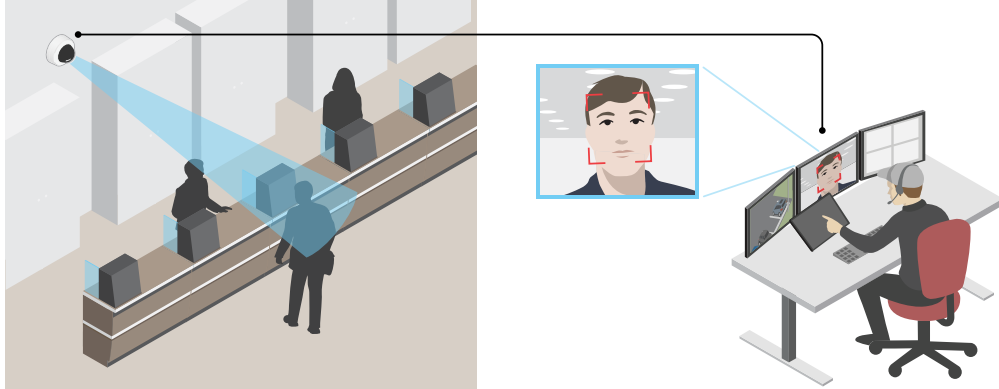
Find out more at axis.com/axis-corridor-format.

Verify the pixel resolution

To verify that a defined part of the image contains enough pixels to, for example, recognize the face of a person, you can use the pixel counter.

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Additional settings



1. Go to **Settings > System > Orientation**.

2. Click  .

3. In the camera's live view, adjust the size and position of the rectangle around the area of interest, for example where you expect faces to appear.

You can see the number of pixels for each of the rectangle's sides (X and Y), and decide if the values are enough for your needs.

Hide parts of the image with privacy masks

You can create one or several privacy masks to hide parts of the image.



How to create a privacy mask

1. Go to **Settings > Privacy mask**.
2. Click **New**.
3. Adjust the size, color, and name of the privacy mask according to your needs.

AXIS M42 Network Camera Series

Additional settings



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10106902

How to change the appearance of the mask

Show a text overlay in the video stream when the device detects motion

This example explains how to display the text "Motion detected" when the device detects motion.



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10103832

How to show text overlay when the camera detects motion

Make sure that AXIS Video Motion Detection is running:

1. Go to **Settings > Apps > AXIS Video Motion Detection**.
2. Start the application if it is not already running.
3. Make sure you have set up the application according to your needs.

Add the overlay text:

4. Go to **Settings > Overlay**.
5. Enter #D in the text field.
6. Choose text size and appearance.

Create a rule:

7. Go to **System > Events > Rules** and add a rule.
8. Type a name for the rule.
9. In the list of conditions, select **AXIS Video Motion Detection**.
10. In the list of actions, select **Use overlay text**.
11. Select a view area.
12. Type "Motion detected".
13. Set the duration.

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Additional settings

14. Click **Save**.

View and record video

This section includes instructions about how to configure your device. To learn more about how streaming and storage works, go to *Streaming and storage on page 20*.

Reduce bandwidth and storage

Important

If you reduce the bandwidth it can result in loss of details in the picture.

1. Go to live view and select **H.264**.
2. Go to **Settings > Stream**.
3. Do one or more of the following:

Note

The zipstream settings are used for both H.264 and H.265.

- Turn on dynamic GOP and set a high GOP length value.
- Increase the compression.
- Turn on dynamic FPS.

Note

Web browsers do not support H.265 decoding. Use a video management system or application supporting H.265 decoding.

View a live video stream on a monitor

Your camera can transmit a live video stream to an HDMI monitor even without a network connection. The monitor can be used for surveillance purposes or for public viewing, e.g. in a store.

1. Connect an external monitor using the HDMI connector.
2. Change the HDMI settings under **Settings > System > HDMI**.

Important

In order to view the video stream via the HDMI connector, be sure to select a capture mode that supports HDMI.

Set up network storage

To store recordings on the network, you need to set up your network storage.

1. Go to **Settings > System > Storage**.
2. Click **Setup** under **Network storage**.
3. Enter the IP address of the host server.
4. Enter the name of the shared location on the host server.
5. Move the switch if the share requires a login, and enter username and password.
6. Click **Connect**.

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Additional settings

Record and watch video

To record video you must first set up network storage, see *Set up network storage on page 15*, or have an SD card installed.

Record video

1. Go to the live view.
2. To start a recording, click **Record**. Click again to stop the recording.

Watch video

1. Click **Storage > Go to recordings**.
2. Select your recording in the list and it will play automatically.

Set up rules and alerts

You can create rules to make your device perform an action when certain events occur. A rule consists of conditions and actions. The conditions can be used to trigger the actions. For example, the device can start a recording or send an email when it detects motion, or show an overlay text while the device is recording.

Trigger an action

1. Go to **Settings > System > Events** to set up a rule. The rule defines when the device will perform certain actions. Rules can be setup as scheduled, recurring, or for example, triggered by motion detection.
2. Select the **Condition** that must be met to trigger the action. If you specify more than one condition for the rule, all of the conditions must be met to trigger the action.
3. Select which **Action** the device should perform when the conditions are met.

Note

If you make changes to an active rule, you have to restart the rule for the changes to take effect.

Note

If you change the definition of a stream profile that is used in a rule, you have to restart all the rules that use that stream profile.

Record video when the camera detects motion

This example explains how to set up the camera to start recording to the SD card five seconds before it detects motion and to stop one minute after.



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10106619

How to record a video stream when the camera detects motion

Make sure that AXIS Video Motion Detection is running:

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Additional settings

1. Go to **Settings > Apps > AXIS Video Motion Detection**.
2. Start the application if it is not already running.
3. Make sure you have set up the application according to your needs. If you need help, see the *user manual for AXIS Video Motion Detection 4*.

Create a rule:

1. Go to **Settings > System > Events** and add a rule.
2. Type a name for the rule.
3. In the list of conditions, under **Application**, select **AXIS Video Motion Detection (VMD)**.
4. In the list of actions, under **Recordings**, select **Record video while the rule is active**.
5. Select an existing stream profile or create a new one.
6. Set the prebuffer time to 5 seconds.
7. Set the postbuffer time to 60 seconds.
8. In the list of storage options, select **SD card**.
9. Click **Save**.

Send an email automatically if someone spray paints the lens



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10106687

How to send an email notification if someone spray paint the lens



1. Go to **Settings > System > Detectors**.
2. Turn on **Trigger on dark images**. This will trigger an alarm if the lens is sprayed, covered, or rendered severely out of focus.
3. Set a duration for **Trigger after**. The value indicates the time that must pass before an email is sent.

Create a rule:

1. Go to **Settings > System > Events > Rules** and add a rule.
2. Type a name for the rule.
3. In the list of conditions, select **Tampering**.
4. In the list of actions, select **Send notification to email**.
5. Select a recipient from the list or go to **Recipients** to create a new recipient.

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Additional settings

- To create a new recipient, click  . To copy an existing recipient, click  .
6. Type a subject and a message for the email.
 7. Click **Save**.

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[Learn more](#)

[Learn more](#)

About capture modes

A capture mode consists of a resolution and the corresponding frame rate available in the product. The capture mode setting affects the camera's field of view and aspect ratio.

The lower resolution capture mode is cropped out from the highest resolution.

In the table below, you can see the available capture modes and additional available buffers for this product.

Capture mode	Additional 1080p buffer available
3MP 2048x1536 (4:3) @ 25/30 fps	1
3MP (HDMI)	0
1080p (1920x1080)	2
1080p (HDMI)	1

View area

A view area is a cropped part of the full view. You can stream and store view areas instead of the full view to minimize bandwidth and storage needs. If you enable PTZ for a view area, you can pan, tilt and zoom within it. By using view areas you can remove parts of the full view, for example, the sky.

When you set up a view area, we recommend you to set the video stream resolution to the same size as or smaller than the view area size. If you set the video stream resolution larger than the view area size it implies digitally scaled up video after sensor capture, which requires more bandwidth without adding image information.

Remote focus and zoom

The remote focus and zoom functionality allows you to make focus and zoom adjustments to your camera from a computer. It is a convenient way to ensure that the scene's focus, viewing angle and resolution are optimized without having to visit the camera's installation location.

Privacy masks

A privacy mask is a user-defined area that prevents users from viewing a part of the monitored area. In the video stream, privacy masks appear as blocks of solid color.

You'll see the privacy mask on all snapshots, recorded video, and live streams.

You can use the VAPIX® application programming interface (API) to turn off the privacy masks.

Important

If you use multiple privacy masks it may affect the product's performance.

Important

Set the zoom and focus before you create a privacy mask.

Note

If you view the video stream over HDMI and restart the product, the privacy masks will disappear. To show the privacy masks again, restart the video stream.

AXIS M42 Network Camera Series

Learn more

Overlays

Note

Image and text overlay will not be displayed on video stream over HDMI.

Overlays are superimposed over the video stream. They are used to provide extra information during recordings, such as a timestamp, or during product installation and configuration. You can add either text or an image.

Streaming and storage

Video compression formats

Decide which compression method to use based on your viewing requirements, and on the properties of your network. The available options are:

Motion JPEG

Motion JPEG, or MJPEG, is a digital video sequence that is made up of a series of individual JPEG images. These images are then displayed and updated at a rate sufficient to create a stream that shows constantly updated motion. For the viewer to perceive motion video the rate must be at least 16 image frames per second. Full motion video is perceived at 30 (NTSC) or 25 (PAL) frames per second.

The Motion JPEG stream uses considerable amounts of bandwidth, but provides excellent image quality and access to every image contained in the stream.

H.264 or MPEG-4 Part 10/AVC

Note

H.264 is a licensed technology. The Axis product includes one H.264 viewing client license. To install additional unlicensed copies of the client is prohibited. To purchase additional licenses, contact your Axis reseller.

H.264 can, without compromising image quality, reduce the size of a digital video file by more than 80% compared to the Motion JPEG format and by as much as 50% compared to the MPEG-4 standard. This means that less network bandwidth and storage space are required for a video file. Or seen another way, higher video quality can be achieved for a given bitrate.

H.265 or MPEG-H Part 2/HEVC

Note

H.265 is licensed technology. The Axis product includes one H.265 viewing client license. To install additional unlicensed copies of the client is prohibited. To purchase additional licenses, contact your Axis reseller.

Bitrate control

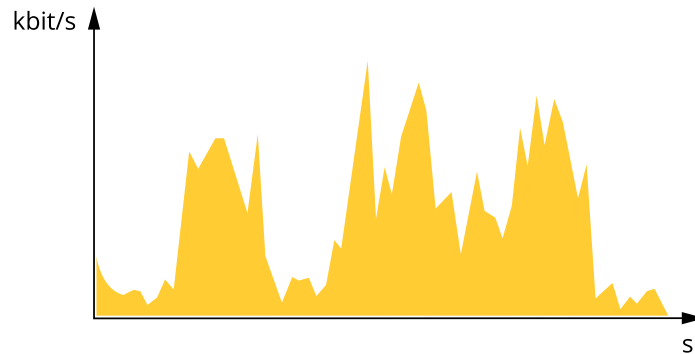
With bitrate control, you can manage the bandwidth consumption of your video stream.

Variable bitrate (VBR)

With variable bitrate, the bandwidth consumption varies based on the level of activity in the scene. The more activity in the scene, the more bandwidth you need. You are guaranteed constant image quality but it requires storage margins.

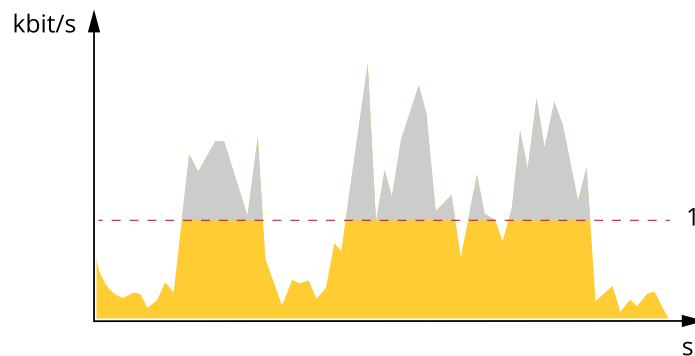
AXIS M42 Network Camera Series

Learn more



Maximum bitrate (MBR)

With maximum bitrate, you can set a target bitrate to handle bitrate limitations in your system. You may see a decline in image quality or frame rate when the instantaneous bitrate is kept below the specified target bitrate. You can choose to either prioritize image quality or frame rate. We recommend that you configure the target bitrate to a higher value than the expected bitrate. This gives you a margin for additional complexity that needs to be captured.



1 Target bitrate

Applications

AXIS Camera Application Platform (ACAP) is an open platform that enables third parties to develop analytics and other applications for Axis products. To find out more about available applications, downloads, trials and licenses, go to axis.com/applications.

To find the user manuals for Axis applications, go to axis.com.

Note

- Several applications can run at the same time but some applications might not be compatible with each other. Certain combinations of applications might require too much processing power or memory resources when run in parallel. Verify that the applications work together before deployment.

AXIS M42 Network Camera Series

Learn more



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10001688

How to download and install an application



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10001688

How to activate an application licence code on a device


AXIS M42 Network Camera Series

Troubleshooting

Troubleshooting

Reset to factory default settings

⚠WARNING

 IR emitted from this product. Do not look at operating lamp.

Important

Reset to factory default should be used with caution. A reset to factory default resets all settings, including the IP address, to the factory default values.

Note

For products with multiple IP addresses channel 1 will have the address 192.168.0.90, channel 2 will have the address 192.168.0.91 and so on.

To reset the product to the factory default settings:

1. Disconnect power from the product.
2. Press and hold the control button while reconnecting power. See *Product overview on page 4*.
3. Keep the control button pressed for 15–30 seconds until the status LED indicator flashes amber.
4. Release the control button. The process is complete when the status LED indicator turns green. The product has been reset to the factory default settings. If no DHCP server is available on the network, the default IP address is 192.168.0.90.
5. Use the installation and management software tools to assign an IP address, set the password, and access the video stream.
The installation and management software tools are available from the support pages on axis.com/support.
6. Refocus the product.

It is also possible to reset parameters to factory default through the web interface. Go to **Settings > System > Maintenance** and click **Default**.

Firmware options


Axis offers product firmware management according to either the active track or the long-term support (LTS) tracks. Being on the active track means continuously getting access to all the latest product features, while the LTS tracks provide a fixed platform with periodic releases focused mainly on bug fixes and security updates.

Using firmware from the active track is recommended if you want to access the newest features, or if you use Axis end-to-end system offerings. The LTS tracks are recommended if you use third-party integrations, which are not continuously validated against the latest active track. With LTS, the products can maintain cybersecurity without introducing any significant functional changes or affecting any existing integrations. For more detailed information about Axis product firmware strategy, go to axis.com/support/firmware.

Check the current firmware

Firmware is the software that determines the functionality of network devices. One of your first actions when troubleshooting a problem should be to check the current firmware version. The latest version may contain a correction that fixes your particular problem.

To check the current firmware:

1. Go to the product's webpage.
2. Click the help menu  .

AXIS M42 Network Camera Series

Troubleshooting

3. Click About.

Upgrade the firmware

Important

Preconfigured and customized settings are saved when the firmware is upgraded (provided that the features are available in the new firmware) although this is not guaranteed by Axis Communications AB.

Important

Make sure the product remains connected to the power source throughout the upgrade process.

Note

When you upgrade the product with the latest firmware in the active track, the product receives the latest functionality available. Always read the upgrade instructions and release notes available with each new release before upgrading the firmware. To find the latest firmware and the release notes, go to axis.com/support/firmware.

AXIS Device Manager can be used for multiple upgrades. Find out more at axis.com/products/axis-device-manager.



To watch this video, go to the web version of this document.

www.axis.com/products/online-manual/44428#t10095327

How to upgrade the firmware

1. Download the firmware file to your computer, available free of charge at axis.com/support/firmware.
2. Log in to the product as an administrator.
3. Go to **Settings > System > Maintenance**. Follow the instructions on the page. When the upgrade has finished, the product restarts automatically.

Technical issues, clues and solutions

If you can't find what you're looking for here, try the troubleshooting section at axis.com/support.

Problems upgrading the firmware

Firmware upgrade failure	If the firmware upgrade fails, the device reloads the previous firmware. The most common reason is that the wrong firmware file has been uploaded. Check that the name of the firmware file corresponds to your device and try again.
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Problems setting the IP address

The device is located on a different subnet	If the IP address intended for the device and the IP address of the computer used to access the device are located on different subnets, you cannot set the IP address. Contact your network administrator to obtain an IP address.
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AXIS M42 Network Camera Series

Troubleshooting

The IP address is being used by another device	Disconnect the Axis device from the network. Run the ping command (in a Command/DOS window, type <code>ping</code> and the IP address of the device): <ul style="list-style-type: none">If you receive: <code>Reply from <IP address>: bytes=32; time=10...</code> this means that the IP address may already be in use by another device on the network. Obtain a new IP address from the network administrator and reinstall the device.If you receive: <code>Request timed out</code>, this means that the IP address is available for use with the Axis device. Check all cabling and reinstall the device.
Possible IP address conflict with another device on the same subnet	The static IP address in the Axis device is used before the DHCP server sets a dynamic address. This means that if the same default static IP address is also used by another device, there may be problems accessing the device.

The device cannot be accessed from a browser

Cannot log in	When HTTPS is enabled, ensure that the correct protocol (HTTP or HTTPS) is used when attempting to log in. You may need to manually type <code>http</code> or <code>https</code> in the browser's address field. If the password for the user <code>root</code> is lost, the device must be reset to the factory default settings. See <i>Reset to factory default settings on page 23</i> .
The IP address has been changed by DHCP	IP addresses obtained from a DHCP server are dynamic and may change. If the IP address has been changed, use AXIS IP Utility or AXIS Device Manager to locate the device on the network. Identify the device using its model or serial number, or by the DNS name (if the name has been configured). If required, a static IP address can be assigned manually. For instructions, go to axis.com/support .

The device is accessible locally but not externally

To access the device externally, we recommend using one of the following applications for Windows®:

- AXIS Companion: free of charge, ideal for small systems with basic surveillance needs.
- AXIS Camera Station: 30-day trial version free of charge, ideal for small to mid-size systems.

For instructions and download, go to axis.com/vms.

Problems with streaming

Multicast H.264 only accessible by local clients	Check if your router supports multicasting, or if the router settings between the client and the device need to be configured. The TTL (Time To Live) value may need to be increased.
No multicast H.264 displayed in the client	Check with your network administrator that the multicast addresses used by the Axis device are valid for your network. Check with your network administrator to see if there is a firewall preventing viewing.
Poor rendering of H.264 images	Ensure that your graphics card is using the latest driver. The latest drivers can usually be downloaded from the manufacturer's website.
Color saturation is different in H.264 and Motion JPEG	Modify the settings for your graphics adapter. Go to the adapter's documentation for more information.
Lower frame rate than expected	<ul style="list-style-type: none">See <i>Performance considerations on page 26</i>.Reduce the number of applications running on the client computer.Limit the number of simultaneous viewers.Check with the network administrator that there is enough bandwidth available.Lower the image resolution.Log in to the device's webpage and set a capture mode that prioritizes frame rate. Changing the capture mode to prioritize frame rate might lower the maximum resolution depending on the device used and capture modes available.
Can't select H.265 encoding in live view	Web browsers do not support H.265 decoding. Use a video management system or application supporting H.265 decoding.

AXIS M42 Network Camera Series

Troubleshooting

Problems retrieving additional video streams

'Video Error' displayed in AXIS Companion, or	<p>This camera is designed to deliver up to four different streams. If a fifth unique stream is requested, the camera will not be able to provide it, and an error message is displayed. The error message depends on the way the stream is requested. The streams are used on a first come, first served basis. Examples of instances using a stream are:</p> <ul style="list-style-type: none">• Live viewing in a web browser or other application• While recording - continuous or motion triggered recording• An event using images on the camera, for example an event sending an e-mail with an image every hour• An installed and running application, such as AXIS Video Motion Detection, will always consume a video stream, whether it is used or not. A stopped application does not consume a video stream. <p>The camera can deliver more than four simultaneous streams provided the configuration of any additional stream is identical to any of the first four streams. Identical configuration implies exactly the same resolution, frame rate, compression, video format, rotation etc. For more information see the white paper "Max number of unique video stream configurations", available at axis.com.</p>
'Stream: Error. Something went wrong. Maybe there are too many viewers.' in Chrome/Firefox, or	
'503 service unavailable' error in Quick Time, or	
'Camera not available' displayed in AXIS Camera Station, or	
'Error reading video stream' message in browser when using the Java applet	

Performance considerations

When setting up your system, it is important to consider how various settings and situations affect the performance. Some factors affect the amount of bandwidth (the bitrate) required, others can affect the frame rate, and some affect both. If the load on the CPU reaches its maximum, this also affects the frame rate.

The following factors are the most important to consider:

- High image resolution or lower compression levels result in images containing more data which in turn affects the bandwidth.
- Rotating the image in the GUI will increase the product's CPU load.
- Access by large numbers of Motion JPEG or unicast H.264 clients affects the bandwidth.
- Simultaneous viewing of different streams (resolution, compression) by different clients affects both frame rate and bandwidth.

Use identical streams wherever possible to maintain a high frame rate. Stream profiles can be used to ensure that streams are identical.

- Accessing Motion JPEG and H.264 video streams simultaneously affects both frame rate and bandwidth.
- Heavy usage of event settings affects the product's CPU load which in turn affects the frame rate.
- Using HTTPS may reduce frame rate, in particular if streaming Motion JPEG.
- Heavy network utilization due to poor infrastructure affects the bandwidth.
- Viewing on poorly performing client computers lowers perceived performance and affects frame rate.
- Running multiple AXIS Camera Application Platform (ACAP) applications simultaneously may affect the frame rate and the general performance.

AXIS M42 Network Camera Series

Specifications

Specifications

LED indicators

Status LED	Indication
Unlit	Connection and normal operation.
Green	Shows steady green for 10 seconds for normal operation after startup completed.
Amber	Steady during startup. Flashes during firmware upgrade or reset to factory default.
Amber/Red	Flashes amber/red if network connection is unavailable or lost.

SD card slot

NOTICE

- Risk of damage to SD card. Do not use sharp tools, metal objects, or excessive force when inserting or removing the SD card. Use your fingers to insert and remove the card.
- Risk of data loss and corrupted recordings. Do not remove the SD card while the product is running. Unmount the SD card from the product's webpage before removal.

This product supports microSD/microSDHC/microSDXC cards.

For SD card recommendations, see axis.com.



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Buttons

Control button

The control button is used for:

- Resetting the product to factory default settings. See *Reset to factory default settings on page 23*.

Connectors

HDMI connector

Use the HDMI™ connector to connect a display or public view monitor.

This product uses HDMI type D.

HDMI output:

- 1280p 16:9 format (50/60 Hz)
- 1080p 16:9 format (50/60 Hz)
- 720p 4:3 format (50/60 Hz)

Network connector

RJ45 Ethernet connector with Power over Ethernet (PoE).

